

University of Groningen

Does believing accompany belonging? Correlations and trends in Western Europe and North America between 1981 and 2000.

Aarts, Olav; Need, Ariane; Grotenhuis, Manfred te; Graaf, Nan Dirk de

Published in:
Review of Religious Research

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2008

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Aarts, O., Need, A., Grotenhuis, M. T., & Graaf, N. D. D. (2008). Does believing accompany belonging? Correlations and trends in Western Europe and North America between 1981 and 2000. *Review of Religious Research*, 50(1), 16.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

DOES BELONGING ACCOMPANY BELIEVING? CORRELATIONS AND TRENDS IN WESTERN EUROPE AND NORTH AMERICA BETWEEN 1981 AND 2000*

OLAV AARTS
ARIANA NEED
MANFRED TE GROTENHUIS
NAN DIRK DE GRAAF
Radboud University, Nijmegen

REVIEW OF RELIGIOUS RESEARCH 2008, VOLUME 50(1): PAGES 16-34

Using the European and World Value Surveys from 1981, 1990, and 2000, this paper examines trends in Christian beliefs, church attendance, and the relationship between believing and belonging. It further looks at the influence of religious pluralism on this relationship in Western Europe and North America. The main finding of this study is that in most countries there is no growing gap between Christian believing and Christian belonging. Indeed, the relationship between believing and belonging at the individual level has remained practically unchanged in the Western world over the past two decades. The slight weakening in the relation between believing and belonging measured for some countries stems from the fact that in those countries both believing and belonging declined, but the decline in belonging was stronger. Moreover, a higher degree of religious pluralism does not result in a stronger association between believing and belonging, as would be expected from supply-side theory.

INTRODUCTION AND RESEARCH QUESTIONS

There is abundant evidence that both church membership rates and church attendance have declined in most West European societies over the past decades (Bruce 2002; Davie 1994, 2003; Lechner 1996; Martin 1991; Stark and Iannaccone 1996). Although secularization and supply-side theory both explain why church membership rates and attendance have dwindled, the question of whether Christian beliefs have declined as well, resulting in a growing gap between believing and belonging, is not settled yet. This paper examines trends in the relationship between Christian believing and Christian belonging between 1981 and 2000 and investigates the extent to which religious pluralism affects this relationship.

Davie (1990a, 1994, 2002) added another dimension to the debate about secularization by explicitly focusing on the relationship between “belonging,” that is, church membership and church attendance, and “believing,” that is, adherence to religious beliefs. Davie’s analyses showed that countries with low church membership rates do not necessarily have low levels of religious belief, which she subsequently called *believing without belonging* (Davie 1990b; 1994; 2002). Her general hypothesis is that in Western societies a growing number

of people uphold religious beliefs without formal attachment to a church. This hypothesis, however, was only tested by comparing church membership rates and average religious belief at the country level. To avoid the risk of the so-called ecological fallacy (Robinson 1950), which arises from aggregating religious participation and religious belief, we explicitly examine the relationship between “believing” and “belonging” of *individuals* in Western Europe and North America. Furthermore, we derive rival hypotheses about the trend in this relationship from secularization theory and supply-side theory.

Secularization theory states that religious practice and belief are directly related and that current trends are towards fewer individuals attending religious practice and towards fewer individuals expressing religious beliefs, although these trends possibly move at different speeds and in different directions (Berger 1967; Bruce 2002; Martin 1978; Wilson 1982). Because these two trends are related, the relationship between believing and belonging should by and large be stable over time. Alternatively, the relationship could also become stronger if more people who believe also start belonging, and people who stopped belonging, later, also stop believing. According to supply-side theory, religious belief is an exogenous phenomenon, which is not affected by the extent to which individuals attend religious services. Subsequently, a decrease in religious practice is not necessarily accompanied by a weakening of religious belief or an adoption of secular ideas (Iannaccone 1997; Stark 1997). Consequently, the relationship between believing and belonging should decline over time. Given these different expectations, our first research question has two parts:

- 1a. What are the trends in religious belief (believing) and religious practice (belonging) in Western Europe and North America between 1981 and 2000?
- 1b. What is the trend in the relationship between believing and belonging in Western Europe and North America between 1981 and 2000?

The concept of religious pluralism has played a key role in both secularization and supply-side theory. Secularization theory states that religious pluralism induces lower levels of both believing and belonging, because alternative religions tend to challenge the plausibility structure of well-established beliefs (Berger 1967; Bruce 2002). This may cause a decline in both individual belief and individual belonging. If this decline occurs at roughly the same pace, the relationship between believing and belonging is expected to be unaffected by the degree of pluralism in a society. In contrast, supply-side theory states that religious pluralism fosters religious participation, as societies with religious monopolies have large unmet religious needs while societies with a high degree of religious pluralism are more likely to satisfy diverse religious needs (Stark and Iannaccone 1994). If this is the case, a strong relationship between believing and belonging should be found in societies with more religious pluralism. Our second research question aims to provide insight into the relationship between religious pluralism and the extent to which individual believing and belonging go hand in hand:

2. To what extent did religious pluralism affect the relationship between believing and belonging in Western Europe and North America between 1981 and 2000?

This paper aims to improve upon previous research in three ways. First, neither Davie (1990a, 1990b, 1994, 2002) nor her critics (Voas and Crockett 2005) examined the relationship between believing and belonging at the individual level. Instead, they studied the

relation between sociodemographic characteristics and religious commitment at an aggregate country level. However, comparing church membership rates and percentages of people who express Christian beliefs may be misleading. For instance, if the percentage of people expressing beliefs is higher than the percentage attending religious services, one may infer that there is indeed believing without belonging. However, individuals who often attend religious services may have stronger beliefs than individuals attending religious services less often. In other words, even though more people uphold Christian beliefs than there are church members, there could be a strong association between the two at the individual level.

Second, our analysis focuses on believing and belonging in a strict Christian sense. Voas and Crockett (2005) call this the strong version of believing without belonging. This implies that where people uphold Christian beliefs but do not attend Christian church services, there is believing without belonging.¹ Davie did not relate Christian beliefs to Christian belonging. For example, if one examines belonging to a Christian church, one should also examine Christian beliefs rather than belief in any religious faith, since the gap between believing and belonging would otherwise be overestimated. Therefore, we explicitly focus on the relationship between Christian believing and Christian belonging (at the individual level). This offers a new opportunity to test both secularization theory and supply-side theory. The questions about religious beliefs in the data carry a monotheistic, Christian signature; therefore we solely focus on Christian believing and belonging.

Third, with respect to the stability of Christian belief and church attendance, most research has employed only data from one or two points in time (Davie 1990a; Stark and Iannaccone 1994; 1996). A longer time period is preferable to obtain more accurate estimates of religious fluctuations. Therefore, we use data from the three waves of the European Value Survey in addition to similar data for North America, covering the period between 1981 and 2000.

THEORY AND HYPOTHESES

Various explanations have been put forward to explain the strong empirical evidence of declining church membership and attendance throughout Western Europe (Bruce 2002; Stark and Iannaccone 1994). Moreover, there is disagreement as to whether the decline in religious participation has been accompanied by a decline in religious belief as well.

Secularization theorists argue that practice and belief are directly related. In their view, believing and belonging follow roughly the same downward trend. This argument contains a Durkheimian notion of religion. In order to have definite beliefs one is dependent on the surrounding social environment, at least to some extent (Berger and Luckmann 1974; Bruce 1999). Religious gatherings are assumed to empower creeds, making church membership and attendance vital for individual religiosity to endure. Consequently, the relationship between believing and belonging is expected over time to remain about equally strong. However, if the secularization process in the long run leads to a small proportion of hardcore religious people and a large proportion of non-religious people, the relationship could become even stronger. The implication is that believing without belonging is at best a short (individual) transitional phase in the emergence of a thoroughly secular culture, and not a new feature of late modernity (Voas and Crockett 2005). This leads to our first hypothesis:

Does Belonging Accompany Believing?

- H1a. In Western Europe and North America, there has been a decline of both individual Christian believing and belonging, and therefore the relationship between individual Christian believing and Christian belonging did not weaken over time.

Supply-side theorists, on the other hand, argue that belief in the supernatural is strong and reasonably robust, while religious practice might be substantially less in case there is inadequate religious supply. While outward expressions of religion—like church membership and attendance—decline, individual belief endures. Consequently, religious belief becomes heterogeneous and detached from traditional religious institutions. This results in a growing gap between believing and belonging. This gap is expected to continue to grow as long as European governments maintain their support to certain religious traditions, forcing religious organizations into competition for “customers” and allowing the emergence of religious pluralism (Finke 1997; Stark and Iannaccone 1994). If, according to supply-side theory, individual belief endures and belonging declines, the relationship between believing and belonging will weaken over time. Therefore the competing hypothesis of supply-side theory reads:

- H1b. In Western Europe and North America, individual Christian believing has been stable while belonging has decreased; therefore the relationship between individual Christian believing and Christian belonging weakened over time.

Next to trends in believing and belonging and their (changing) relationship we focus on a factor that might influence this relationship, namely religious pluralism. According to secularization theory, the plausibility of religion in a monopolistic situation is massive and durable in consciousness. Furthermore, effective socialization in such a context means that religion is taken as self-evident (Berger 1967; Berger and Luckmann 1974). In other words, in a monotheistic society, the religious “canopy” is stable and durable; hence religious belief and participation are widespread (Berger 1967). Secularization theory assumes that people who have religious beliefs belong to a church as well. Consequently, the relationship between believing and belonging is expected to be strong. If more religions co-exist in a society (*i.e.*, if there is more religious pluralism), religious plausibility structures supposedly lose strength, therefore causing secularization. In such a situation, individual disbelief rises and levels of religious participation decline (Berger 1967; Bruce 2002, 2003). In sum, according to secularization theory, religious pluralism causes religious belief and participation to decline simultaneously. Consequently, the relationship between those two remains more or less the same, regardless of the level of religious pluralism. Correspondingly, hypothesis 2a reads:

- H2a. The relationship between individual Christian believing and Christian belonging is independent of societies’ level of religious pluralism.

Supply-side theorists, on the other hand, stress that the relation between belief and participation is affected by the degree of religious pluralism present in a country. They argue that the state influences religious participation by regulating religious markets—*i.e.*, allowing religious pluralism via subsidizing or suppressing certain religious traditions (Berger 1967; Stark and Iannaccone 1994). It is assumed that a stable religious demand exists but also that people differ in their religious desires and tastes. Accordingly, religious diversity

is rooted in social niches: groups of people sharing the same specific religious preferences (Finke and Stark 1988; Stark 2001; Stark and Iannaccone 1994). This diverse nature of religious demand necessitates pluralism. Thus, in societies where religious pluralism is absent or low, not all are able to satisfy their religious needs. This is due to the inherent inability to satisfy all distinct consumer preferences where there is only one religious institution (Stark and Iannaccone 1994). Levels of religious participation will consequently be low. As it is assumed that all people have more or less stable religious needs, the relationship between believing and belonging will consequently be weak. When more religious suppliers enter a religious market, the urge to satisfy demands of individual customers becomes stronger. Therefore, churches will likely specialize to stay attractive. Thus, the increase in religious choice enables more people to satisfy their religious needs—and they would express their belief by going to church—leading to religious revitalization (Finke and Stark 1988). Hence, a larger proportion of a population will be religiously involved and the relationship between believing and belonging will be strong. Hence, our hypotheses derived from supply-side theory reads as follows:

- H2b. The relationship between individual Christian believing and Christian belonging in societies with a high degree of religious pluralism is stronger than in societies with a low degree of religious pluralism.

DATA AND OPERATIONALIZATION

Categories of Religious Pluralism

Since the often-used index of religious pluralism, the Herfindahl Index, has proven highly problematic (Chaves and Gorski 2001; Voas, Olson, and Crockett 2002), we use Martin's (1978) categorization of societies to determine the degree of religious pluralism. Most Western European societies have a long history of a strong bond with the church, which can be traced as far back as before Emperor Constantine (ca. 285-337 C.E.). In recent history, this close entanglement of state and church has been largely dissolved. However, the historical situation in which one or two churches are supported by the state still resonates throughout Europe.

Societies with a history of Catholic monopoly, like France, Spain, and Italy, have the least religious pluralism in Europe nowadays. These nations cannot be said to have an unregulated religious economy, nor do they have any substantial pluralism (Martin 1978; Stark and Iannaccone 1994).

Besides nations with a history of a Catholic monopoly, there are nations that are traditionally Protestant. Examples are the Scandinavian countries, England, and Canada. These societies continue to have Protestant monopolies. In most Protestant Western European nations, especially the Scandinavian countries, there is however some degree of pluralism but only within the state-church. This makes them slightly more pluralistic than traditionally Catholic societies (Martin 1978).

Countries like the Netherlands and Germany traditionally have a mixed situation. Historically, these societies are partly organized on a confessional basis (Martin 1978). Sometimes, the United Kingdom is also regarded as a religiously mixed country due to the presence of Catholics and Protestants, with their fierce conflict, in a predominantly Anglican society. Since we aim here to improve on the work of Davie, we categorize the United Kingdom,

similar to Davie, as traditionally mixed (Davie 2002). The United States is characterized by separation of church and state and a highly unregulated religious economy (Stark and Iannaccone 1994), which makes it highly pluralistic.

In sum, societies can range from having virtually no pluralism to having a highly pluralistic religious economy. Traditionally Catholic countries have virtually no pluralism, while traditionally Protestant societies have a higher degree of pluralism. Societies with a traditionally mixed situation are even more pluralistic, while the United States has the highest degree of pluralism.

To test our hypotheses we constructed a repeated cross-sectional dataset from the European Value Surveys and the World Value Surveys including the waves from 1981, 1990, and

Table 1
Respondents per Country and Wave

| | 1981 | 1990 | 2000 | Total per country |
|---|-------|-------|-------|-------------------|
| <i>Traditionally Catholic societies</i> | | | | |
| Belgium | 1005 | 2725 | 1776 | 5506 |
| France | 836 | 975 | 1580 | 3391 |
| Ireland | 1172 | 997 | 969 | 3138 |
| Italy | 1347 | 2004 | 1986 | 5337 |
| Spain | 2296 | 4104 | 2366 | 8766 |
| <i>Traditionally Protestant societies</i> | | | | |
| Canada | 1254 | 1650 | 1840 | 4744 |
| Denmark | 1165 | 928 | 992 | 3085 |
| Iceland | 823 | 667 | 923 | 2413 |
| Sweden | 884 | 985 | 1003 | 2872 |
| <i>Traditionally mixed societies</i> | | | | |
| Germany | 1297 | 2079 | 1080 | 4456 |
| Netherlands | 1166 | 974 | 946 | 3086 |
| United Kingdom | 1490 | 1649 | 894 | 4033 |
| United States of America | 2206 | 1593 | 838 | 4637 |
| Total N | 16941 | 21330 | 17193 | 55464 |

Source: WVS 1981, 1990, 2000.

2000. We selected the United States, Canada, and 11 Western European countries (Belgium, Denmark, France, Germany, Iceland, Ireland, Italy, Netherlands, Spain, Sweden, and United Kingdom). Not included were countries that were only available in one or two waves and countries that missed important items measuring traditional Christian beliefs. East Germany was excluded because of its post-communist character. The selected respondents were individuals between 18 and 90 years of age who were either non-denominational or belonged to a Christian denomination. No adherents of other faiths were included because the focus of this study is on Christian believing and belonging. These selections resulted in a combined dataset of 55,464 individuals distributed over 13 countries. Table 1 presents the distribution of respondents over the countries and respective waves.

Variables Measuring Christian Beliefs and Belonging

The European Value Surveys measure various aspects of Christian belief. We selected those that were asked in all societies and in all three waves: belief in (i) God, (ii) life after death, (iii) heaven and (iv) hell.² The answer categories employed were “no” and “yes.” The “don’t know” response category turned out to be a small proportion of the respondents, with an average of approximately 10% in any of the waves. We omitted this category from further analyses because the response signifies doubt at the least and disbelief at the most (Bruce 1995; Lechner 1996).³

To answer our research questions we constructed an overall Christian belief scale (Cronbach’s $\alpha = 0.81$).⁴ Respondents had to have a valid answer on at least three of the four Christian beliefs to be included in the overall scale. Religious participation—*belonging*—is measured by church attendance. People were asked how often they attended religious services, apart from weddings, funerals and festivities. All holy day categories were merged, as well as attendance of “less than once a year” and “almost never.” The answer categories derived thus ranged from “less than once a year” to “more than once a week” and were converted into a per year attendance scale.⁵ Table 2 shows the descriptive statistics of the variables in the analyses.

Table 2
Descriptive Statistics of Variables

| | Range | Mean | Standard deviation |
|------------------|-------|-------|--------------------|
| Belonging | 0-104 | 18.83 | 30.25 |
| Belief in: God | 0 / 1 | 0.81 | 0.39 |
| life after death | 0 / 1 | 0.59 | 0.49 |
| heaven | 0 / 1 | 0.53 | 0.50 |
| hell | 0 / 1 | 0.32 | 0.47 |
| Christian belief | 0-1 | 0.56 | 0.38 |

Source: WVS 1981, 1990, 2000.

Table 3

Belief in God, Life after Death, Heaven and Hell, in Percentages per Country per Wave and Estimated Log Linear Trends

| | Belief in God | | | | Belief in life after death | | | | Belief in heaven | | | | Belief in hell | | | |
|---|---------------|------|------|---------|----------------------------|------|------|---------|------------------|------|------|---------|----------------|------|------|---------|
| | 1981 | 1990 | 2000 | Trend | 1981 | 1981 | 2000 | Trend | 1981 | 1990 | 2000 | Trend | 1981 | 1990 | 2000 | Trend |
| <i>Traditionally Catholic societies</i> | | | | | | | | | | | | | | | | |
| Belgium | 86.8 | 70.9 | 70.2 | -0.38** | 50.0 | 44.3 | 44.1 | -0.10** | 42.6 | 33.1 | 31.0 | -0.24** | 22.1 | 16.1 | 17.2 | -0.13** |
| France | 85.4 | 61.1 | 60.9 | -0.54** | 52.0 | 43.5 | 44.3 | -0.14** | 36.4 | 31.8 | 30.8 | -0.12** | 20.1 | 16.6 | 18.9 | -0.02 |
| Ireland | 97.8 | 97.6 | 96.7 | -0.22 | 85.0 | 83.3 | 81.6 | -0.13** | 89.6 | 89.5 | 87.1 | -0.13* | 60.2 | 52.4 | 55.3 | -0.11** |
| Italy | 87.9 | 90.0 | 93.5 | 0.36** | 56.9 | 67.6 | 72.7 | 0.36** | 44.3 | 52.4 | 58.7 | 0.30** | 33.3 | 40.4 | 49.1 | 0.35** |
| Spain | 91.5 | 85.5 | 85.0 | -0.29** | 66.9 | 51.0 | 53.1 | -0.28** | 55.5 | 52.0 | 50.9 | -0.10** | 38.3 | 29.3 | 36.7 | -0.03 |
| <i>Traditionally Protestant societies</i> | | | | | | | | | | | | | | | | |
| Canada | 93.3 | 88.3 | 91.1 | -0.10 | 70.7 | 68.9 | 74.9 | 0.13* | 75.3 | 71.4 | 76.8 | 0.07 | 42.3 | 40.9 | 51.2 | 0.21** |
| Denmark | 63.0 | 66.9 | 68.7 | 0.14** | 29.7 | 33.5 | 37.6 | 0.19* | 16.5 | 18.6 | 17.9 | 0.05 | 8.0 | 7.4 | 8.7 | 0.05 |
| Iceland | 82.0 | 86.2 | 84.1 | 0.08 | 82.2 | 81.4 | 77.8 | -0.15** | 58.4 | 57.3 | 58.2 | -0.00 | 13.0 | 11.6 | 16.8 | 0.18** |
| Sweden | 61.8 | 45.6 | 53.2 | -0.16** | 34.3 | 38.8 | 46.3 | 0.27* | 31.2 | 30.9 | 30.2 | -0.03 | 9.5 | 8.0 | 8.8 | -0.04 |
| <i>Traditionally mixed societies</i> | | | | | | | | | | | | | | | | |
| Germany | 79.6 | 77.4 | 71.7 | -0.23** | 45.8 | 49.6 | 40.5 | -0.11** | 33.9 | 36.4 | 32.0 | -0.05 | 14.7 | 14.1 | 20.7 | 0.23** |
| Netherlands | 70.7 | 63.4 | 57.9 | -0.30** | 50.5 | 44.4 | 49.3 | -0.03 | 44.2 | 36.4 | 35.4 | -0.20** | 16.1 | 13.5 | 12.6 | -0.15** |
| United Kingdom | 84.3 | 81.6 | 71.3 | -0.41** | 63.3 | 55.2 | 58.7 | -0.13** | 67.8 | 64.4 | 56.8 | -0.24** | 38.5 | 34.3 | 37.1 | -0.05 |
| United States of America | 98.0 | 96.3 | 96.0 | -0.39** | 80.7 | 79.0 | 84.8 | 0.11* | 91.0 | 87.4 | 88.5 | -0.17** | 74.6 | 71.9 | 75.3 | -0.01 |

Source: WVS 1981, 1990, 2000.

** =sign p<0.05 (two-tailed).

* = sign p<0.10 (two-tailed).

ANALYSES

From secularization theory and supply-side theory we inferred competing predictions about possible changes in Christian belief. To get a detailed picture of the changes in Christian belief that took place between 1981 and 2000, we first separately analysed each item that measures an aspect of Christian belief. Since floor and ceiling effects are conceivable, we used logistic regression to estimate a trend parameter.⁶ Table 3 displays the results of the analysis.

Belief in God declined in more than half of the traditionally Catholic societies. In Ireland there was no significant change, while in Italy we observed a significant increase. In all of the traditionally mixed societies and in the United States belief in God has significantly declined. In half of the traditionally Protestant societies there was no significant change. Sweden witnessed a decrease in the number of people who believe in God, whereas Denmark saw a slight increase.

Believing in life after death decreased significantly in most Catholic countries. Again, in Italy we note a rise in belief in life after death. In traditionally Protestant and mixed societies, the results vary. For instance, in the Netherlands there was no significant change, while in Iceland, Germany, and the United Kingdom there was a significant decline. In Canada, Denmark, Sweden, and the United States the number of people who believe in life after death increased significantly.

Belief in heaven declined in four out of the five traditionally Catholic societies, only Italy witnessed an increase. In the traditionally Protestant societies no change was measured in belief in heaven. In Germany, the percentage of people who believe in heaven did not significantly decline, while in the Netherlands, the United Kingdom, and the United States a significant downward trend occurred.

For belief in hell the pattern is diverse. Somewhat less than half of the countries experienced no significant change in belief in hell. In traditionally Catholic societies there was either a decline or stability, with the exception of Italy where it increased. The opposite was true for the traditionally Protestant societies, where belief in hell either remained stable or increased. For the traditionally mixed societies, there was no significant change in the United Kingdom and United States. In Germany belief in hell increased; the Netherlands saw a decline in the percentage of people who believe in hell.

Next, we estimated the *general* trend in Christian belief and belonging as displayed in Table 4. The largest absolute decrease in Christian belief was found in France (-0.05 per 10 years), whereas the largest increase was in Italy (0.07). In six countries (Belgium, France, Ireland, Netherlands, Spain, and the United Kingdom) the trend in Christian belief is significantly downward. Interestingly, along with Italy, Germany, and the United States, in none of the traditionally Protestant societies was there any sign of an overall decrease.

Almost the same conclusions can be drawn from the estimated trend in church attendance, that is, Christian belonging. In traditionally Catholic societies, except Italy, and in traditionally mixed societies, church attendance rates are on the decline. In the traditionally Protestant societies of Denmark and Iceland there is stability, the trend is insignificant for Canada and modest for Sweden. The United States again shows no change in church attendance rates during 1981-2000. In order to compare the trends in believing and belonging per country we also calculated a standardized trend for each country. In most of the countries with a downward trend in believing, the downfall in belonging was relatively stronger. In only two soci-

Table 4
Christian Belief (total) and Belonging (church attendance), in Mean Scores per Country per Wave
and Estimated Unstandardized and Standardized Linear Trends (decennial change)

| | Christian belief | | | | Belonging (church attendance) | | | | | |
|---|------------------|-------|-------|-------------|-------------------------------|-------|-------|-------|------------|------------------------|
| | 1981 | 1990 | 2000 | Trend | | 1981 | 1990 | 2000 | Trend | |
| | | | | unstandard. | standard. [†] | | | | unstandard | standard. [†] |
| <i>Traditionally Catholic societies</i> | | | | | | | | | | |
| Belgium | 0.496 | 0.404 | 0.397 | -0.04** | -0.12 | 20.90 | 17.78 | 12.75 | -4.42** | -0.16 |
| France | 0.476 | 0.378 | 0.372 | -0.05** | -0.14 | 9.70 | 6.80 | 5.70 | -1.99** | -0.11 |
| Ireland | 0.834 | 0.810 | 0.807 | -0.01** | -0.06 | 58.05 | 54.53 | 43.93 | -7.38** | -0.22 |
| Italy | 0.545 | 0.616 | 0.683 | 0.07** | 0.20 | 22.67 | 26.87 | 28.48 | 2.92** | 0.09 |
| Spain | 0.627 | 0.540 | 0.558 | -0.03** | -0.10 | 27.97 | 20.84 | 18.54 | -4.88** | -0.15 |
| <i>Traditionally Protestant societies</i> | | | | | | | | | | |
| Canada | 0.704 | 0.676 | 0.735 | 0.02** | 0.06 | 22.02 | 19.36 | 19.75 | -1.05* | -0.03 |
| Denmark | 0.275 | 0.305 | 0.319 | 0.02** | 0.08 | 2.80 | 3.00 | 3.20 | 0.17 | 0.02 |
| Iceland | 0.586 | 0.593 | 0.588 | 0.00 | 0.00 | 3.20 | 2.55 | 3.20 | 0.03 | 0.00 |
| Sweden | 0.333 | 0.302 | 0.335 | 0.00 | 0.01 | 4.70 | 4.21 | 3.20 | -0.82** | -0.06 |
| <i>Traditionally mixed societies</i> | | | | | | | | | | |
| Germany | 0.425 | 0.434 | 0.401 | -0.01 | -0.04 | 13.65 | 12.92 | 10.78 | -1.50** | -0.06 |
| Netherlands | 0.451 | 0.388 | 0.385 | -0.04** | -0.10 | 17.65 | 13.29 | 9.71 | -4.19** | -0.16 |
| United Kingdom | 0.629 | 0.590 | 0.557 | -0.04** | -0.10 | 16.23 | 13.49 | 9.42 | -3.54** | -0.13 |
| United States of America | 0.864 | 0.839 | 0.863 | 0.00 | -0.02 | 32.36 | 32.46 | 33.10 | 0.035 | (0.01) |
| ** = sign p<0.05 (two-tailed). | | | | | | | | | | |
| Source: WVS 1981, 1990, 2000. | | | | | | | | | | |

unstandard standard.[†]

Source: WVS 1981, 1990, 2000.

eties, Canada and Sweden, did Christian belief remain stable or increase somewhat, while belonging to a church decreased, indicating a trend towards believing without belonging.

From secularization theory and supply-side theory, we derived competing predictions about possible changes in the relationship between Christian believing and belonging. We then formally tested the extent to which Christian believing and Christian belonging at the individual level went together over the past two decades. We used OLS regression analysis to estimate the linear trend in the Pearson correlation coefficients between Christian beliefs and Christian belonging. Table 5 displays the results.⁷

With the exception of the United States, all trends in the relationship between believing and belonging are negative. As pointed out earlier, in only two countries (*i.e.*, Canada and Sweden) this decrease is the result of stable Christian belief and decreasing church attendance rates (*cf.* Table 4). In Italy, for instance, the estimated correlation was 0.536 in 1981 and dropped significantly, by 0.05 points every ten years. This, however, is the result of a trend towards *stronger* beliefs and *higher* rates of belonging. Interestingly, the correlation between believing and belonging in the United States did not change between 1981 and 2000.

A rather low correlation between believing and belonging does not necessarily imply that belief is widespread while belonging is marginal. In countries with a history of a religious monopoly there might well be belonging without believing, *i.e.*, widespread attachment to institutionalized religion with relatively weak Christian belief (Hamberg and Pettersson 1994). Besides, religiosity may be driven by non-religious incentives. It is known that there are non-religious sanctions for non-participation in the United States (Chaves and Gorski 2001; Martin 1978; Moore 1994). However, in our analyses we found no corroboration for these arguments. We thus conclude that the correlations presented indeed reflect believing without belonging, as found in off-diagonal effects. Changes towards believing without belonging are stronger and far more common than changes towards belonging without believing.⁸ In general, people who have Christian beliefs but do not attend church cause the gap between Christian believing and Christian belonging rather than individuals belonging to a Christian church without expressing Christian beliefs. In addition, in traditionally Catholic and mixed societies correlations between believing and belonging remain high. This indicates that there is no widespread Christian believing without Christian belonging in those countries.

In sum, we find evidence in favor of hypothesis 1a: The relationship between believing and belonging, in general, did not weaken significantly over time. Where the relationship did weaken, it was not the result of a trend towards believing without belonging. Mostly, any weakening of this relationship was the product of a process by which both Christian belief and belonging declined, however—and this is crucial—at different rates.

The results in Table 5 also provide an answer to the question of the extent to which religious pluralism influences the relationship between believing and belonging. The relationship between believing and belonging in societies with little religious pluralism is not uniformly weaker than in societies with a high degree of religious pluralism. The situation in the United States is striking in this respect. Despite a high degree of pluralism, the correlation between individuals believing and belonging is relatively low. This suggests a relatively great amount of Christian religiosity outside of churches, compared to countries with a lower degree of pluralism. Moreover, the correlation between believing and belonging is relatively high in traditionally Catholic and mixed societies. These findings do not lend support to either hypothesis 2a or 2b.

Table 5

OLS Regression (per country) of Christian Beliefs on Christian Belonging (church attendance) and Wave, and Observed Correlations between Christian Beliefs and Christian Belonging per Country and Wave (cf. note 7)

| | Estim. corr. 1981 | Decennial change | corr 1981 | corr 1990 | corr 2000 |
|---|----------------------|---------------------|--------------|--------------|--------------|
| <i>Traditionally Catholic societies</i> | | | | | |
| Belgium | 0.509** | -0.017 | 0.504 | 0.496 | 0.474 |
| France | 0.456** | -0.058** | 0.425 | 0.453 | 0.342 |
| Ireland | 0.401** | -0.019 | 0.418 | 0.346 | 0.384 |
| Italy | 0.536** | -0.053** | 0.489 | 0.541 | 0.411 |
| Spain | 0.555** | -0.053** | 0.552 | 0.510 | 0.452 |
| <i>Traditionally Protestant societies</i> | | | | | |
| Canada | 0.375** | -0.034* | 0.384 | 0.330 | 0.315 |
| Denmark | 0.438** | -0.058** | 0.451 | 0.357 | 0.340 |
| Iceland | 0.212** | -0.069** | 0.223 | 0.121 | 0.089 |
| Sweden | 0.414** | -0.039 | 0.379 | 0.443 | 0.314 |
| <i>Traditionally mixed societies</i> | | | | | |
| Germany | 0.549** | -0.039* | 0.528 | 0.540 | 0.455 |
| Netherlands | 0.564** | -0.033 | 0.557 | 0.549 | 0.494 |
| United Kingdom | 0.434** | -0.054** | 0.434 | 0.383 | 0.332 |
| United States of America | 0.274** | 0.023 | 0.226 | 0.317 | 0.301 |

** = sign $p < 0.01$ (one-tailed).

Source: WVS 1981, 1990, 2000.

* = sign $p < 0.05$ (one-tailed).

CONCLUSION

In this study we uncovered several important facts associated with Christian religiosity in modern Western societies. First, we derived testable and rival hypotheses about the relationship between believing and belonging from secularization and supply-side theory. In this respect our main finding was that in most countries there is no growing gap between Christian believing and Christian belonging. The relationship between believing and belonging at the individual level has remained practically unchanged in the Western world over the past two decades. As we showed, the slight decrease in the relationship between believing and belonging that was found for some countries was due to the fact that both believing and

belonging declined in those countries; but that belonging declined more strongly than believing. Along with decreasing religious belief, this implies that believing without belonging, as Voas and Crockett (2005) argued, is at best a short transitional period as a predominantly secular culture appears and not a characteristic of late modernity.

Second, secularization theory and supply-side theory are both refuted when it comes to hypotheses regarding the extent to which religious pluralism influences the relationship between believing and belonging. The relationship between Christian believing and Christian belonging varies for societies that differ in their degree of religious pluralism, but not in the expected direction. Strikingly, the relationship between Christian believing and Christian belonging is relatively weak in the United States, the most religiously plural country. This finding is opposite to supply-side theorists' expectations (Finke 1997; Stark and Iannaccone 1994). The relatively weak relationship between Christian believing and Christian belonging in a highly pluralistic society is in accordance with previous findings of Kelly and De Graaf (1997). According to supply-side theory, societies with religious monopolies should have large unmet religious needs, unlike highly pluralistic nations like the United States, where diverse religious needs are expected to be met. This implies that those who do not attend church are more devout in monopolistic societies. Like Kelley and De Graaf (1997) we found the opposite: people who do not, or to a lesser extent, belong are more devout in religiously pluralistic societies such as the United States than in societies with a low degree of religious pluralism. Perhaps we should examine more country-specific characteristics to explain these differences in correlations between believing and belonging.

We can best summarize this study by saying that supply-side theory explains little of the recent changes of direction in religiosity. For now, secularization theory does a better job. Most religious beliefs are declining, and the process of secularization seems to continue in Western societies, with the possible exception of Italy. Although Christian belief is high in the United States, belief in God and heaven are declining too. It is quite likely that the results found in this study underestimate the actual situation, due to differences in fertility. Religious people, on average, have more children than non-religious people (Hout, Greeley, and Wilde 2001). This means that a larger group of people would be somewhere in the transitional phase moving from religious to secular. This would further weaken the relationship between believing and belonging, since religious people lose their faith more often than non-religious people become religious.

A promising avenue for future research would be to take changes in the number of religious services into account, in addition to religious diversity. Denominations might vary in the extent to which they invest in their own supply. Availability of religious services does seem to influence religious participation (Bernts and De Graaf 2003; Hamberg and Pettersson 1997). This might explain the relative success of predominantly Catholic societies, which is otherwise a troubling anomaly for supply-side theory (Chaves and Cann 1992; Chaves and Gorski 2001; Iannaccone 1991).

Processes of secularization in modern Western societies present a complex and mixed picture. Nevertheless, in this general outline, secularization theory seems most plausible for the time being, compared to supply-side theory. Unlike Davie, we found no evidence of a common European trend towards more believing without belonging. When it comes to the question of whether belonging still accompanies believing, our answer would be yes, at least for now.

APPENDIX

Table 6

Traditional Christian Beliefs and Attendance (belonging), in Percentages, per Country
per Wave

For convenience of comparison the traditional Christian beliefs scale was merged into three categories.

| | | | | | | | | | | | | |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Belgium. | | | | | | | | | | | | |
| Christian beliefs | 1981 | | | | 1990 | | | | 2000 | | | |
| | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 33.0 | 6.7 | 6.8 | 46.5 | 38.1 | 4.8 | 6.1 | 48.9 | 38.7 | 6.6 | 6.7 | 52.0 |
| once a year | 2.2 | 0.8 | 0.8 | 3.9 | 2.1 | 0.5 | 0.4 | 3.1 | 3.3 | 1.3 | 0.7 | 5.4 |
| on holy days | 2.5 | 2.2 | 2.5 | 7.2 | 6.1 | 4.0 | 3.1 | 13.2 | 7.8 | 4.2 | 4.4 | 16.3 |
| once a month | 2.5 | 1.2 | 4.3 | 8.0 | 3.1 | 2.0 | 2.9 | 7.9 | 2.9 | 1.9 | 3.7 | 8.5 |
| once a week | 4.7 | 4.9 | 20.5 | 30.1 | 3.9 | 4.8 | 12.7 | 21.3 | 2.6 | 3.0 | 8.0 | 13.6 |
| more than once a week | 0.3 | 0.3 | 3.7 | 4.3 | 0.7 | 0.6 | 4.3 | 5.6 | 0.1 | 0.5 | 3.7 | 4.3 |
| | 45.2 | 16.1 | 38.7 | 100 | 53.9 | 16.7 | 29.4 | 100 | 55.4 | 17.4 | 27.2 | 100 |
| France. | | | | | | | | | | | | |
| Christian beliefs | 1981 | | | | 1990 | | | | 2000 | | | |
| | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 35.2 | 8.4 | 9.0 | 52.5 | 47.2 | 7.4 | 6.4 | 61.0 | 49.6 | 8.7 | 11.2 | 69.4 |
| once a year | 2.5 | 1.3 | 1.3 | 5.2 | 4.1 | 1.4 | 1.6 | 7.0 | 3.0 | 1.1 | 1.9 | 6.0 |
| on holy days | 6.3 | 4.2 | 7.0 | 17.5 | 5.8 | 3.8 | 5.6 | 15.2 | 5.2 | 2.4 | 5.6 | 13.2 |
| once a month | 1.2 | 2.4 | 5.4 | 9.0 | 0.9 | 1.6 | 4.4 | 6.9 | 0.5 | 1.5 | 2.3 | 4.3 |
| once a week | 0.4 | 2.7 | 11.0 | 14.2 | 0.4 | 1.2 | 7.0 | 8.6 | 0.2 | 0.8 | 4.3 | 5.3 |
| more than once a week | 0.1 | 0.3 | 1.2 | 1.6 | 0.1 | 0.0 | 1.1 | 1.2 | 0.2 | 0.3 | 1.2 | 1.7 |
| | 45.5 | 19.3 | 34.9 | 100 | 58.4 | 15.4 | 26.2 | 100 | 58.7 | 14.8 | 26.5 | 100 |
| Ireland. | | | | | | | | | | | | |
| Christian beliefs | 1981 | | | | 1990 | | | | 2000 | | | |
| | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 3.0 | 0.4 | 1.7 | 5.1 | 2.4 | 0.5 | 1.6 | 4.6 | 2.5 | 1.2 | 5.0 | 8.7 |
| once a year | 0.4 | 0.4 | 0.5 | 1.3 | 0.1 | 0.2 | 0.9 | 1.2 | 1.3 | 0.9 | 2.1 | 4.3 |
| on holy days | 0.4 | 0.6 | 1.9 | 2.8 | 1.0 | 1.5 | 2.8 | 5.3 | 1.8 | 1.6 | 6.9 | 10.3 |
| once a month | 0.5 | 1.4 | 3.3 | 5.2 | 0.5 | 0.9 | 4.9 | 6.3 | 0.7 | 1.7 | 6.5 | 9.0 |
| once a week | 1.8 | 4.3 | 51.1 | 57.1 | 2.4 | 5.2 | 51.4 | 59.0 | 2.0 | 2.8 | 45.4 | 50.2 |
| more than once a week | 0.2 | 0.7 | 27.7 | 28.6 | 0.4 | 1.1 | 22.1 | 23.6 | 0.2 | 0.4 | 16.9 | 17.5 |
| | 6.2 | 7.7 | 86.1 | 100 | 6.9 | 9.5 | 83.7 | 100 | 8.6 | 8.6 | 82.8 | 100 |

Italy.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 21.1 | 2.8 | 3.7 | 27.6 | 15.3 | 2.5 | 1.9 | 19.7 | 9.5 | 3.2 | 3.3 | 16.1 |
| once a year | 2.9 | 1.2 | 0.9 | 5.1 | 2.1 | 0.9 | 1.3 | 4.4 | 1.9 | 0.6 | 1.3 | 3.8 |
| on holy days | 8.1 | 3.2 | 7.6 | 18.9 | 8.8 | 3.8 | 7.8 | 20.3 | 6.7 | 5.3 | 12.3 | 24.3 |
| once a month | 3.5 | 3.5 | 6.9 | 13.9 | 2.4 | 2.2 | 8.0 | 12.7 | 2.3 | 2.6 | 8.2 | 13.1 |
| once a week | 3.3 | 3.9 | 19.7 | 26.9 | 2.0 | 3.9 | 25.0 | 30.9 | 2.7 | 4.2 | 24.3 | 31.3 |
| more than once a week | 0.4 | 0.5 | 6.6 | 7.5 | 0.3 | 0.7 | 11.0 | 12.1 | 0.4 | 0.9 | 10.3 | 11.5 |
| | 39.3 | 15.2 | 45.5 | 100 | 30.9 | 14.0 | 55.1 | 100 | 23.5 | 16.8 | 59.7 | 100 |

Spain.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 19.5 | 5.9 | 5.6 | 31.0 | 28.5 | 4.9 | 7.2 | 40.7 | 28.3 | 5.5 | 9.4 | 43.2 |
| once a year | 1.9 | 1.1 | 1.2 | 4.2 | 1.5 | 0.8 | 1.4 | 3.7 | 1.5 | 1.2 | 1.9 | 4.6 |
| on holy days | 3.1 | 2.6 | 3.1 | 8.8 | 5.2 | 3.3 | 6.3 | 14.8 | 5.2 | 2.5 | 6.4 | 14.2 |
| once a month | 2.1 | 2.3 | 7.6 | 11.9 | 1.5 | 2.0 | 5.6 | 9.1 | 2.3 | 1.8 | 7.2 | 11.2 |
| once a week | 2.1 | 3.9 | 26.0 | 32.0 | 2.1 | 3.0 | 17.2 | 22.3 | 1.9 | 2.1 | 14.7 | 18.7 |
| more than once a week | 0.2 | 0.8 | 11.2 | 12.2 | 0.3 | 0.5 | 8.6 | 9.5 | 0.2 | 0.7 | 7.1 | 8.0 |
| | 28.2 | 16.6 | 54.6 | 100 | 39.2 | 14.6 | 46.2 | 100 | 39.4 | 13.9 | 46.7 | 100 |

Canada.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 10.2 | 5.8 | 14.6 | 30.6 | 15.0 | 4.9 | 14.4 | 34.3 | 10.7 | 5.2 | 17.8 | 33.7 |
| once a year | 2.0 | 1.7 | 5.2 | 9.0 | 1.7 | 1.3 | 5.2 | 8.3 | 1.8 | 1.5 | 7.1 | 10.3 |
| on holy days | 2.4 | 3.1 | 7.6 | 13.1 | 2.4 | 2.9 | 10.9 | 16.2 | 1.6 | 2.9 | 12.1 | 16.6 |
| once a month | 1.3 | 2.1 | 10.8 | 14.2 | 1.0 | 2.2 | 9.3 | 12.5 | 1.0 | 1.2 | 8.1 | 10.3 |
| once a week | 0.5 | 2.4 | 21.7 | 24.6 | 0.8 | 1.9 | 18.8 | 21.5 | 0.5 | 1.0 | 19.9 | 21.5 |
| more than once a week | 0.2 | 0.2 | 8.2 | 8.6 | 0.2 | 0.7 | 6.3 | 7.2 | 0.0 | 0.7 | 6.9 | 7.6 |
| | 16.6 | 15.3 | 68.1 | 100 | 21.2 | 13.8 | 65.0 | 100 | 15.7 | 12.4 | 72.0 | 100 |

Denmark.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|-----------------------|------|-----|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 52.0 | 3.6 | 4.2 | 59.8 | 45.9 | 6.1 | 5.1 | 57.0 | 40.3 | 7.0 | 4.3 | 51.6 |
| once a year | 11.5 | 1.1 | 1.9 | 14.5 | 9.1 | 3.9 | 2.3 | 15.3 | 11.1 | 2.9 | 2.6 | 16.6 |
| on holy days | 10.9 | 1.9 | 2.4 | 15.2 | 12.4 | 2.3 | 2.1 | 16.8 | 12.5 | 4.0 | 3.6 | 20.2 |
| once a month | 2.3 | 0.8 | 4.3 | 7.3 | 2.3 | 1.7 | 4.3 | 8.3 | 3.6 | 2.5 | 2.9 | 9.0 |
| once a week | 0.0 | 0.1 | 2.9 | 3.0 | 0.1 | 0.3 | 1.9 | 2.3 | 0.1 | 0.3 | 1.5 | 1.9 |
| more than once a week | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.0 | 0.1 | 0.6 | 0.87 |
| | 76.7 | 7.5 | 15.8 | 100 | 69.9 | 14.2 | 15.8 | 100 | 67.7 | 16.8 | 15.5 | 100 |

Does Belonging Accompany Believing?

Iceland.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 16.9 | 9.9 | 20.3 | 47.2 | 13.5 | 11.4 | 19.1 | 43.9 | 16.3 | 8.0 | 19.3 | 43.6 |
| once a year | 3.1 | 3.7 | 8.5 | 15.3 | 3.7 | 3.2 | 8.8 | 15.7 | 3.5 | 3.6 | 11.1 | 18.2 |
| on holy days | 3.1 | 5.5 | 18.1 | 26.7 | 2.8 | 8.0 | 20.4 | 31.2 | 3.6 | 7.2 | 15.8 | 26.6 |
| once a month | 0.3 | 1.0 | 6.8 | 8.1 | 1.1 | 0.9 | 5.2 | 7.3 | 0.4 | 1.9 | 6.7 | 9.0 |
| once a week | 0.0 | 0.1 | 2.0 | 2.1 | 0.0 | 0.4 | 1.1 | 1.5 | 0.4 | 0.5 | 1.2 | 2.1 |
| more than once a week | 0.0 | 0.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.4 | 0.4 | 0.0 | 0.3 | 0.1 | 0.4 |
| | 23.4 | 20.2 | 56.4 | 100 | 21.1 | 23.9 | 55.0 | 100 | 24.2 | 21.6 | 54.2 | 100 |

Sweden.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 45.3 | 5.4 | 4.6 | 55.2 | 53.4 | 6.9 | 6.5 | 66.9 | 44.2 | 7.8 | 7.3 | 59.3 |
| once a year | 10.1 | 3.6 | 4.2 | 17.9 | 6.7 | 1.8 | 1.7 | 10.1 | 11.9 | 3.8 | 5.1 | 20.7 |
| on holy days | 8.0 | 2.0 | 3.1 | 13.0 | 5.8 | 1.5 | 4.1 | 11.4 | 4.1 | 3.0 | 3.8 | 10.9 |
| once a month | 1.5 | 1.1 | 6.0 | 8.6 | 1.0 | 1.2 | 4.0 | 6.2 | 1.0 | 0.6 | 3.6 | 5.2 |
| once a week | 0.3 | 0.0 | 2.6 | 2.9 | 0.3 | 0.1 | 3.1 | 3.5 | 0.2 | 0.1 | 3.1 | 3.5 |
| more than once a week | 0.2 | 0.3 | 1.8 | 2.3 | 0.0 | 0.0 | 1.9 | 1.9 | 0.1 | 0.1 | 0.2 | 0.5 |
| | 65.3 | 12.4 | 22.3 | 100 | 67.1 | 11.6 | 21.3 | 100 | 61.5 | 15.4 | 23.1 | 100 |

Germany.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 34.2 | 4.9 | 3.1 | 42.3 | 34.3 | 4.2 | 4.5 | 43.1 | 33.6 | 3.9 | 3.3 | 40.8 |
| once a year | 6.6 | 1.9 | 1.4 | 9.9 | 5.4 | 1.7 | 0.9 | 8.0 | 4.8 | 1.1 | 1.5 | 7.4 |
| on holy days | 5.6 | 4.4 | 2.9 | 12.8 | 6.6 | 3.9 | 4.1 | 14.5 | 10.9 | 3.3 | 5.0 | 19.2 |
| once a month | 3.2 | 4.1 | 7.2 | 14.5 | 3.7 | 3.2 | 7.1 | 14.0 | 4.2 | 4.7 | 8.6 | 17.5 |
| once a week | 1.8 | 2.1 | 12.4 | 16.2 | 0.7 | 2.4 | 13.5 | 16.6 | 2.7 | 2.8 | 7.9 | 13.3 |
| more than once a week | 0.1 | 0.5 | 3.6 | 4.3 | 0.0 | 0.4 | 3.4 | 3.7 | 0.0 | 0.2 | 1.5 | 1.7 |
| | 51.5 | 17.9 | 30.6 | 100 | 50.7 | 15.7 | 33.6 | 100 | 56.2 | 16.0 | 27.8 | 100 |

Netherlands.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 36.3 | 4.1 | 5.5 | 45.9 | 39.8 | 5.0 | 4.7 | 49.4 | 42.1 | 8.7 | 7.3 | 58.1 |
| once a year | 2.6 | 1.0 | 0.7 | 4.2 | 4.1 | 0.7 | 1.2 | 6.1 | 3.9 | 1.6 | 1.0 | 6.6 |
| on holy days | 4.0 | 2.6 | 2.5 | 9.0 | 8.1 | 3.3 | 4.6 | 16.0 | 6.3 | 2.7 | 4.3 | 13.2 |
| once a month | 3.3 | 2.9 | 6.8 | 13.0 | 2.6 | 2.4 | 4.8 | 9.8 | 2.3 | 2.1 | 5.8 | 10.2 |
| once a week | 1.2 | 2.8 | 19.4 | 23.4 | 1.6 | 2.2 | 11.4 | 15.2 | 0.7 | 0.9 | 6.7 | 8.4 |
| more than once a week | 0.4 | 0.2 | 3.7 | 4.3 | 0.0 | 0.2 | 3.2 | 3.5 | 0.1 | 0.2 | 3.1 | 3.5 |
| | 47.9 | 13.6 | 38.5 | 100 | 56.1 | 13.9 | 30.0 | 100 | 55.5 | 16.2 | 28.3 | 100 |

United Kingdom.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|-----------------------|------|------|------|------|------|------|------|------|------|-----|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 21.4 | 8.8 | 18.6 | 48.8 | 25.7 | 6.8 | 17.1 | 49.6 | 31.9 | 6.1 | 23.8 | 61.8 |
| once a year | 2.3 | 1.0 | 3.7 | 7.0 | 2.1 | 1.6 | 4.1 | 7.8 | 2.0 | 1.2 | 3.6 | 6.8 |
| on holy days | 1.7 | 1.9 | 5.6 | 9.1 | 2.7 | 1.7 | 6.2 | 10.6 | 3.6 | 1.2 | 6.4 | 11.2 |
| once a month | 0.9 | 0.8 | 8.5 | 10.2 | 0.9 | 1.3 | 8.6 | 10.8 | 0.5 | 0.3 | 4.1 | 4.9 |
| once a week | 0.6 | 0.8 | 15.3 | 16.8 | 0.7 | 1.8 | 13.3 | 15.8 | 0.8 | 0.9 | 8.3 | 10.0 |
| more than once a week | 0.0 | 0.1 | 8.0 | 8.1 | 0.1 | 0.3 | 4.9 | 5.3 | 0.0 | 0.2 | 5.2 | 5.3 |
| | 26.9 | 13.4 | 59.7 | 100 | 32.3 | 13.5 | 54.2 | 100 | 38.7 | 9.9 | 51.4 | 100 |

United States of America.

| 1981 | | | | | 1990 | | | | 2000 | | | |
|-----------------------|-----|-----|------|------|------|-----|------|------|------|-----|------|------|
| Christian beliefs | 0 | 1 | 2 | | 0 | 1 | 2 | | 0 | 1 | 2 | |
| Attendance | | | | | | | | | | | | |
| never | 3.4 | 2.4 | 14.7 | 20.4 | 5.1 | 2.8 | 15.8 | 23.7 | 5.3 | 2.5 | 12.9 | 20.7 |
| once a year | 0.5 | 0.6 | 5.1 | 6.2 | 0.7 | 0.5 | 5.2 | 6.3 | 0.6 | 0.8 | 6.8 | 8.2 |
| on holy days | 0.7 | 0.8 | 8.4 | 9.8 | 0.9 | 1.0 | 5.6 | 7.5 | 0.3 | 1.0 | 7.8 | 9.1 |
| once a month | 0.6 | 1.3 | 15.7 | 17.6 | 0.8 | 1.4 | 12.5 | 14.8 | 0.1 | 1.3 | 13.2 | 14.6 |
| once a week | 0.4 | 1.1 | 29.6 | 31.0 | 0.7 | 1.3 | 30.2 | 32.1 | 0.8 | 0.3 | 31.5 | 32.5 |
| more than once a week | 0.1 | 0.5 | 14.4 | 14.9 | 0.0 | 0.5 | 15.1 | 15.5 | 0.0 | 0.4 | 14.5 | 14.9 |
| | 5.5 | 6.7 | 87.9 | 100 | 8.2 | 7.4 | 84.4 | 100 | 7.1 | 6.2 | 86.6 | 100 |

NOTES

*All correspondence can be directed to the principal author: O. Aarts, Radboud University Nijmegen, ICS/Sociology, P.O. Box 9104, 6500 HE Nijmegen, the Netherlands. Tel. +31-24-361-2337. E-mail: O.Aarts@maw.ru.nl.

¹The weak version of believing without belonging is, according to Voas and Crockett (2005), a comparison of Christian belonging with whatever individuals express as religious beliefs. Beliefs in the weak version can be as vague as a belief in "something." We argue that the strong version provides more insight into the process of secularization and religious vitality than the weaker version since the latter is rather difficult, if not impossible, to falsify.

²Although the beliefs used here are not *solely* Christian, they are definitely *typical* of Christian religions.

³We also merged the "don't know" and "no" categories. This did not substantially change our results. Of all estimated trends, 45 remained the same, in two cases the trends became even more significant and in five cases significant trends disappeared.

⁴For the 1981, 1990, and 2000 waves, Cronbach's alphas were also calculated for each country separately, all resulted in reliable scales with no substantial deviations from the overall Cronbach's alpha. Results are available at <http://www.ru.nl/methodenentechnieken/bb/results/>.

⁵The distribution of the church attendance measure (a per year scale) is skewed to the right in most countries, which might result in non-linear relationships between Christian belief and church attendance. Consequently, the Pearson correlation coefficients (*cf.* Table 4) could be an underestimation of the real relationship between Christian belief and church attendance. To check whether skewness is a serious problem, we computed for each country and wave the Eta coefficient (we assume Christian belief to be metric). Next, we compared each observed Pearson correlation coefficient and the Eta counterpart and found only small differences. This led us to conclude that it is warranted to present the widely used and easy to compute Pearson correlation coefficient instead of Eta figures. Results are available at <http://www.ru.nl/methodenentechnieken/bb/results/>.

^aAt the individual level, we used the following logistic equation:

$\text{Log}(p^i/(1-p^i)) = a + b^i \cdot \text{wave}$. In this equation, p^i is the probability of scoring 1 on any of the items measuring Christian belief, and b^i is the trend parameter indicating whether this particular item became more popular (positive b) or less popular (negative b) over the years. Note that the variable wave is a metric measure with three categories: 1981, 1990, and 2000.

^bIn Table 5 the individual scores on Christian beliefs (Likert-scale) and Christian belonging have been standardized within each country and wave (average=0, standard deviation=1). Then, we estimated for each country an OLS model with Christian beliefs regressed on belonging and the interaction between belonging and wave (the intercept and the b-coefficient for wave equal zero because of within country/wave standardization). The b-coefficient for belonging denotes the estimated correlation in 1981 while the b-coefficient for belonging*wave denotes the (linear) decennial change of the 1981 correlation. Because we assume a linear change, this is an approximation of the observed correlations in our samples. Therefore, we provided also these observed correlations between Christian beliefs and Christian belonging within each country and wave. So, in the sample from Belgium a correlation of 0.504 was found, while in the OLS regression this correlation is estimated to be 0.509. The observed correlation in 1990 amounts to 0.496 (decline of 0.008) while it amounts to 0.474 in 2000 (decline of 0.022). According to OLS estimates the correlation dropped (linear) from 0.509 in 1981 to 0.492 in 1990, to 0.475 in 2000 (decennial linear change -0.017 and non-significant). Overall, the differences between the observed correlations per wave and the correlations assuming linear change are small. They can be calculated from Table 5 and available at <http://www.ru.nl/methodenentechnieken/bb/results/>.

^cFor a complete overview of the relationship between individual believing and individual belonging, we refer to Table 6 in the appendix.

REFERENCES

- Berger, Peter. L. 1967. *The Sacred Canopy*. New York: Doubleday.
- Berger, Peter. L., and Thomas Luckmann. 1974. *Social Construction of Reality, a Treatise in the Sociology of Knowledge*. Antwerpen and Utrecht: De Nederlandse Boekhandel.
- Bernts, Ton, and Nan Dirk de Graaf. 2003. Church Attendance during Christmas in the Netherlands: Does Supply of Services have an Effect? *The Netherlands' Journal of Social Sciences* 39(3):227-37.
- Bruce, Steve 1995. The Truth about Religion in Britain. *Journal for the Scientific Study of Religion* 34(4):417-30.
- _____. 1999. *Choice and Religion: A Critique of Rational Choice*. New York: Oxford University Press.
- _____. 2002. *God is Dead, Secularization in the West*. Oxford: Blackwell Publishing.
- _____. 2003. The Social Process of Secularization. In *Sociology of Religion*, ed. by Richard K. Fenn. Oxford: Blackwell Publishing.
- Chaves, Mark, and David E. Cann. 1992. Regulation, Pluralism, and Religious Market Structure: Explaining Religion's Vitality. *Rationality and Society* 4 (3):272-90.
- Chaves, Mark, and Philip S. Gorski. 2001. Religious Pluralism and Religious Participation. *Annual Review of Sociology* 27:261-81.
- Davie, Grace. 1990a. 'An Ordinary God': The Paradox of Religion in Contemporary Britain. *British Journal of Sociology* 41(3):395-421.
- _____. 1990b. Believing without Belonging: Is this the Future of Religion in Britain? *Social Compass* 39(4):445-74.
- _____. 1994. *Religion in Britain since 1945: Believing without Belonging*. Oxford: Blackwell.
- _____. 2002. *Europe: The Exceptional Case, Parameters of Faith in the Modern World*. London: Darton, Longman, & Todd.
- _____. 2003. Patterns of Religion in Western Europe: An Exceptional Case. In *Sociology of Religion*, ed. Richard K. Fenn. Oxford: Blackwell.
- Finke, Roger 1997. The Consequences of Religious Competition: Supply-side Explanations for Religious Change. In *Rational Choice and Religion, Summary and Assessment*, ed. Lawrence A. Young. New York: Routledge.
- _____. and Rodney Stark. 1988. Religious Economies and Sacred Canopies: Religious Mobilization in American Cities, 1906. *American Sociological Review* 53(1):41-49.
- Hamberg, Eva M., and Thorleif Pettersson. 1994. The Religious Market: Denominational Competition and Religious Participation in Contemporary Sweden. *Journal for the Scientific Study of Religion* 33(3):205-16.
- _____. 1997. Short-term Changes in Religious Supply and Church Attendance in Contemporary Sweden. *Research in the Social Scientific Study of Religion* 8:35-51.

- Hout, Michael, Andrew Greeley, and Melissa J. Wilde. 2001. The Demographic Imperative in Religious Change in the United States *The American Journal of Sociology* 107(2):468-501.
- Iannaccone, Laurence R. 1991. The Consequences of Religious Market Structure: Adam Smith and the Economics of Religion. *Rationality and Society* 3(2):156-77.
- _____. 1997. Rational Choice: Framework for the Scientific Study of Religion. In *Rational Choice and Religion, Summary and Assessment*, ed. Lawrence A. Young. New York: Routledge.
- Kelley, Jonathan, and Nan Dirk de Graaf. 1997. National Context, Parental Socialization and Religious Belief: Results from 15 Countries. *American Sociological Review* 62:639-59.
- Lechner, Frank L. 1996. Secularization in the Netherlands? *Journal for the Scientific Study of Religion* 35(3):252-64.
- Martin, David. 1978. *A General Theory of Secularization*. Oxford: Basil Blackwell.
- _____. 1991. The Secularization Issue: Prospect and Retrospect. *British Journal of Sociology* 42(3) 465-74.
- Moore, R. Laurence. 1994. *Selling God: American Religion in the Marketplace of Culture*. New York: Oxford University Press.
- Norris, Pippa, and Ronald Inglehart. 2004. *Sacred and Secular: Religion and Politics Worldwide*. Cambridge: Cambridge University Press.
- Robinson, William S. 1950. Ecological Correlations and the Behavior of Individuals. *American Sociological Review* 15:351-57.
- Stark, Rodney. 1997. Bringing Theory Back In. In *Rational Choice Theory and Religion, Summary and Assessment*, ed. Lawrence A. Young. New York: Routledge.
- _____. 2001. *One True God: Historical Consequences of Monotheism*. Princeton, New Jersey: Princeton University Press.
- _____. and Roger Finke. 2002. Beyond Church and Sect: Dynamics and Stability in Religious Economics. In *Sacred Markets, Sacred Canopies: Essays on Religious Markets and Religious Pluralism*, ed. Ted G. Jelen. Lanham, Maryland: Rowman & Littlefield.
- _____. and Laurence R. Iannaccone. 1994. A Supply-side Reinterpretation of the 'Secularization' of Europe. *Journal for the Scientific Study of Religion* 33(3) 230-52.
- _____. and Laurence R. Iannaccone. 1996. Response to Lechner: Recent Religious Declines in Quebec, Poland, and the Netherlands. *Journal for the Scientific Study of Religion* 35(3):265-71.
- Voas, David, and Alasdair Crockett. 2005. Religion in Britain: Neither Believing nor Belonging. *Sociology* 39(1):11-28.
- Voas, David, Daniel V. A. Olson, and Alasdair Crockett. 2002. Religious Pluralism and Participation: Why Previous Research is Wrong. *American Sociological Review* 67:212-30.
- Wilson, Brian J. 1982. *Religion in Sociological Perspective*. New York: Oxford University Press.

Copyright of Review of Religious Research is the property of Religious Research Association Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.